

Sub B1  
A2  
Cont

39. (New) A catalyst composition for treating a diesel engine exhaust stream containing gaseous hydrocarbons and a volatile organic fraction comprises a refractory carrier on which is disposed a coating of a catalytic material comprising: bulk ceria having a BET surface area of at least about 10 m<sup>2</sup>/g, Beta zeolite other than iron-doped Beta zeolite, and a catalytic metal selected from the group consisting of platinum and palladium.

40. (New) The catalyst composition of claim 39 further including bulk alumina having a BET surface area of at least about 10 m<sup>2</sup>/g.

41. (New) The catalyst composition of claim 39 wherein the zeolite comprises a three-dimensional zeolite characterized by pore openings whose smallest cross-sectional dimension is at least about five Angstroms and having a silicon to aluminum atomic ratio of greater than 5.

42. (New) The catalyst composition of claim 39 wherein the zeolite is doped with a catalytic metal selected from the group consisting of platinum and palladium.

43. (New) The composition of claim 39 wherein the zeolite is doped with a catalytic moiety selected from the group consisting of one or more of hydrogen, platinum, rhodium, palladium, ruthenium, osmium, iridium, copper, nickel, chromium and vanadium.

44. (New) The catalyst composition of claim 41, claim 42 or claim 43 further including bulk alumina having a BET surface area of at least about 10 m<sup>2</sup>/g.

45. (New) The catalyst composition of claim 44 wherein the zeolite comprises from about 10 to 90 percent by weight, the alumina comprises from about 60 to 5 percent by weight, and the ceria comprises from about 60 to 5 percent by weight, of the combined weight of the zeolite, the alumina and the ceria.

10080375-061301

46. (New) The catalyst composition of claim 44 wherein the zeolite comprises from about 20 to 70 percent by weight, the alumina comprises from about 50 to 20 percent by weight, and the ceria comprises from about 50 to 20 percent by weight, of the combined weight of the zeolite, the alumina and the ceria.

47. (New) The composition of claim 39 wherein the Beta zeolite is hydrogen-doped Beta zeolite.

48. (New) The composition of claim 39 wherein at least one catalytic metal moiety selected from the group consisting of from about 0.1 to 60 g/ft<sup>3</sup> platinum and from about 0.1 to 200 g/ft<sup>3</sup> palladium is dispersed on the ceria, and wherein there is 10 to 90 percent by weight of zeolite.

49. (New) The composition of claim 39 wherein the zeolite is characterized by pore openings whose smallest cross-sectional diameter is at least about five Angstroms.

50. (New) The catalyst composition of claim 39, claim 40 or claim 41 wherein the zeolite is doped with platinum.

51. (New) The catalyst composition of claim 50 wherein the zeolite is doped by ion-exchanging the zeolite with cationic platinum.

52. (New) The catalyst composition of claim 50 wherein the refractory carrier has a plurality of parallel exhaust flow passages extending therethrough and defined by passage walls on which the catalytic material is coated, wherein platinum is present in a quantity sufficient to provide from about 0.1 to 60 g/ft<sup>3</sup> of platinum.

53. (New) The catalyst composition of claim 52 wherein the platinum is present in an amount of from about 5 to 60 g/ft<sup>3</sup>.

A2  
CM4

09880375-061301

54. (New) The catalyst composition of claim 52 where the platinum is present in the amount of from about 0.1 to 5 g/ft<sup>3</sup>.

55. (New) The catalyst composition of claim 44 wherein the zeolite is disposed in a discrete layer which is overlain by one or more discrete layers containing the alumina and the ceria.

56. (New) The catalyst composition of claim 44 wherein the refractory carrier has a plurality of parallel exhaust flow passages extending therethrough and defined by passage walls on which the catalytic material is coated, and the ceria and alumina each has a BET surface area of from about 25 m<sup>2</sup>/g to 200 m<sup>2</sup>/g.

57. (New) The catalyst composition of claim 39, claim 40 or claim 41 wherein the refractory carrier has a plurality of parallel exhaust flow passages extending therethrough and defined by passage walls on which the catalytic material is coated, and comprising dispersed palladium carried on the catalytic material in a quantity of from about 0.1 to 200 g/ft<sup>3</sup>.

58. (New) The catalyst composition of claim 57 wherein the dispersed palladium is present in an amount of from about 20 to 120 g/ft<sup>3</sup>.

59. (New) A method for treating a diesel engine exhaust stream containing a volatile organic fraction comprises contacting the stream with a catalyst composition under oxidizing conditions including a temperature high enough to catalyze oxidation of at least some of the volatile organic fraction, the catalyst composition comprising a catalytically effective amount of ceria having a BET surface area of at least about 10 m<sup>2</sup>/g and a catalytically effective amount of a Beta zeolite other than iron-doped Beta zeolite.

60. (New) The method of claim 59 wherein the catalyst composition further comprises a catalytically effective amount of alumina having a BET surface area of at least about 10 m<sup>2</sup>/g.

A2  
cont

05880375-061301

61. (New) The method of claim 59 wherein the Beta zeolite comprises from about 10 to 90 percent by weight, the alumina comprises from about 60 to 5 percent by weight, and the ceria comprises from about 60 to 5 percent by weight, of the combined weight of the zeolite, the alumina and the ceria.

62. (New) The method of claim 59 or claim 60 wherein the zeolite is doped with a catalytic moiety selected from the group consisting of one or more of hydrogen, platinum, rhodium, palladium, ruthenium, osmium, iridium, copper, nickel, chromium and vanadium.

63. (New) The method of claim 55 wherein the catalytic moiety comprises platinum.

64. (New) The method of claim 59 or claim 60 wherein the catalyst composition is disposed on a refractory carrier having a plurality of parallel exhaust flow passages extending therethrough and defined by passage walls on which the catalytic material is coated, and the catalytic moiety comprises platinum and is present in a quantity sufficient to provide about 0.1 to 60 g/ft<sup>3</sup> of platinum.

65. (New) The method of claim 64 wherein the platinum is present in the amount of about 5 to 60 g/ft<sup>3</sup> of platinum.

66. (New) The method of claim 64 wherein the platinum is present in the amount of from about 0.1 to 5 g/ft<sup>3</sup>.

67. (New) The method of claim 59 wherein the zeolite is disposed in a discrete layer which is overlain by one or more discrete layers containing the alumina and the ceria.

68. (New) The method of claim 59 wherein the ceria and the alumina each has a BET surface area of from about 25 m<sup>2</sup>/g to 200 m<sup>2</sup>/g.

69. (New) The method of claim 59 or claim 60 wherein the temperature of the exhaust stream initially contacted with the catalyst composition is from about 100°C to 800°C.

A2  
cont

09880375-061301